



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL

RECEIVED

FORM OGC-3

AUG 23 2001

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

MO Oil & Gas Council

<input checked="" type="checkbox"/> APPLICATION TO DRILL <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> FOR AN OIL WELL <input type="checkbox"/> OR GAS WELL			
NAME OF COMPANY OR OPERATOR Town Oil Co., Inc			DATE 8-20-01
ADDRESS 16205 W. 287 St.		CITY Paola	STATE KS ZIP CODE 66071
DESCRIPTION OF WELL AND LEASE			
NAME OF LEASE Dunmire		WELL NUMBER 1	ELEVATION (GROUND) 950
WELL LOCATION (GIVE FOOTAGE FROM SECTION LINE)			
— 250 — FT. FROM (N) <input checked="" type="checkbox"/> SECTION LINE — 947 — FEET FROM (E) <input checked="" type="checkbox"/> SECTION LINE			
WELL LOCATION	SECTION 8	TOWNSHIP 43 _N	RANGE 33 _W COUNTY Cass
NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE — 250 — FEET			
DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED — FOR WELL ON THE SAME LEASE — FEET			
PROPOSED DEPTH 450	DRILLING CONTRACTOR, NAME AND ADDRESS Joy Harper Drilling Co. Urich, MO		ROTARY OR CABLE TOOLS Rotary APPROX. DATE WORK WILL START 12-12-77
NUMBER OF ACRES IN LEASE 950	NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR _____ NUMBER OF ABANDONED WELLS ON LEASE — None —		
IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED?			NO. OF WELLS: PRODUCING _____
NAME _____			INJECTION _____
ADDRESS _____			INACTIVE _____
			ABANDONED _____
STATUS OF BOND		<input type="checkbox"/> SINGLE WELL AMOUNT \$	<input checked="" type="checkbox"/> BLANKET BOND AMOUNT \$ 80,000
			<input checked="" type="checkbox"/> ON FILE <input type="checkbox"/> ATTACHED
REMARKS: (IF THIS IS AN APPLICATION TO DEEPEN OR PLUG BACK, BRIEFLY DESCRIBE WORK TO BE DONE, GIVING PRESENT PRODUCING ZONE AND EXPECTED NEW PRODUCING ZONE; USE BACK OF FORM IF NEEDED.)			
PROPOSED CASING PROGRAM			
AMOUNT	SIZE	WT/FT	CEM.
50'	7 5/8"	surface pipe	
4" pipe to producing horizon			
APPROVED CASING — TO BE FILLED IN BY STATE GEOLOGIST			
AMOUNT	SIZE	WT/FT	CEM.
I, the undersigned, state that I am the <u>President</u> of the <u>Town oil Co., Inc</u> (company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct, and complete to the best of my knowledge.			
SIGNATURE		DATE August 20, 2001	
PERMIT NUMBER 20041	<input checked="" type="checkbox"/> DRILLER'S LOG REQUIRED <input checked="" type="checkbox"/> E-LOGS REQUIRED IF RUN <input checked="" type="checkbox"/> CORE ANALYSIS REQUIRED IF RUN <input checked="" type="checkbox"/> DRILL STEM TEST INFO. REQUIRED IF RUN <input type="checkbox"/> SAMPLES REQUIRED <input type="checkbox"/> SAMPLES NOT REQUIRED <input type="checkbox"/> WATER SAMPLES REQUIRED AT _____		
APPROVAL DATE 12-12-77			
APPROVED BY			
NOTE ► THIS PERMIT NOT TRANSFERABLE TO ANY OTHER PERSON OR TO ANY OTHER LOCATION			
APPROVAL OF THIS PERMIT BY THE OIL AND GAS COUNCIL DOES NOT CONSTITUTE ENDORSEMENT OF THE GEOLOGIC MERITS OF THE PROPOSED WELL NOR ENDORSEMENT OF THE QUALIFICATIONS OF THE PERMITTEE.			
I _____ of the _____ Company confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized council representative.			
DRILLER'S SIGNATURE <u>Lester Town</u>		DATE 8-20-01	

MISSOURI OIL AND GAS COUNCIL

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL ☒ DEEPEN ☐ PLUG BACK ☐

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Form OGC - 3

DEC 07 1977

MO. GEOL. SURV.

NAME OF COMPANY OR OPERATOR Ke-La-Da Enterprises, Inc. DATE 12-6-77Box 197

Address

Archie

City

Missouri, 64725

State

DESCRIPTION OF WELL AND LEASE

Name of lease

Hall

Well number

1

Elevation (ground)

950

WELL LOCATION

(give footage from section lines)

 ft. from (N) (S) sec. line ft. from (E) (W) sec. line

WELL LOCATION

Section 8Township 43N.Range 33W.

County

CassNearest distance from proposed location
to property or lease line:250 feetDistance from proposed location to nearest drilling,
completed or applied - for well on the same lease: feet

Proposed depth:

450

Rotary or Cable tools

Rotary

Approx. date work will start

12-12-77

Number of acres in lease:

950Number of wells on lease, including this well,
completed in or drilling to this reservoir: Number of abandoned wells on lease: noneIf lease, purchased with one or more
wells drilled, from whom purchased:Name Address No. of Wells: producing inactive abandoned

Status of Bond

Single Well ☐ Amt. Blanket Bond ☒ Amt. 10,000☒ ON FILE
☐ ATTACHEDRemarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present
producing zone and expected new producing zone) use back of form if needed.

Proposed casing program:

amt.

size

wt./ft.

cem.

50'7 5/8"surface pipe4" Pipe to producing horizon

Approved casing - To be filled in by State Geologist

amt.

size

wt./ft.

cem.

I, the undersigned, state that I am the Vice-Pres. Treas. of the Ke-La-Da Ent. Inc. (company),
and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and
that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

Therese L. LingerPermit Number: 20041Approval Date: 12 Dec 1977Approved By: W. H. HensleyNote: This Permit not transferable to any other
person or to any other location.Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250 Rolla, Mo. 65401

One will be returned.

☒ SAMPLES REQUIRED☐ SAMPLES NOT REQUIRED

WATER SAMPLES REQUIRED @:

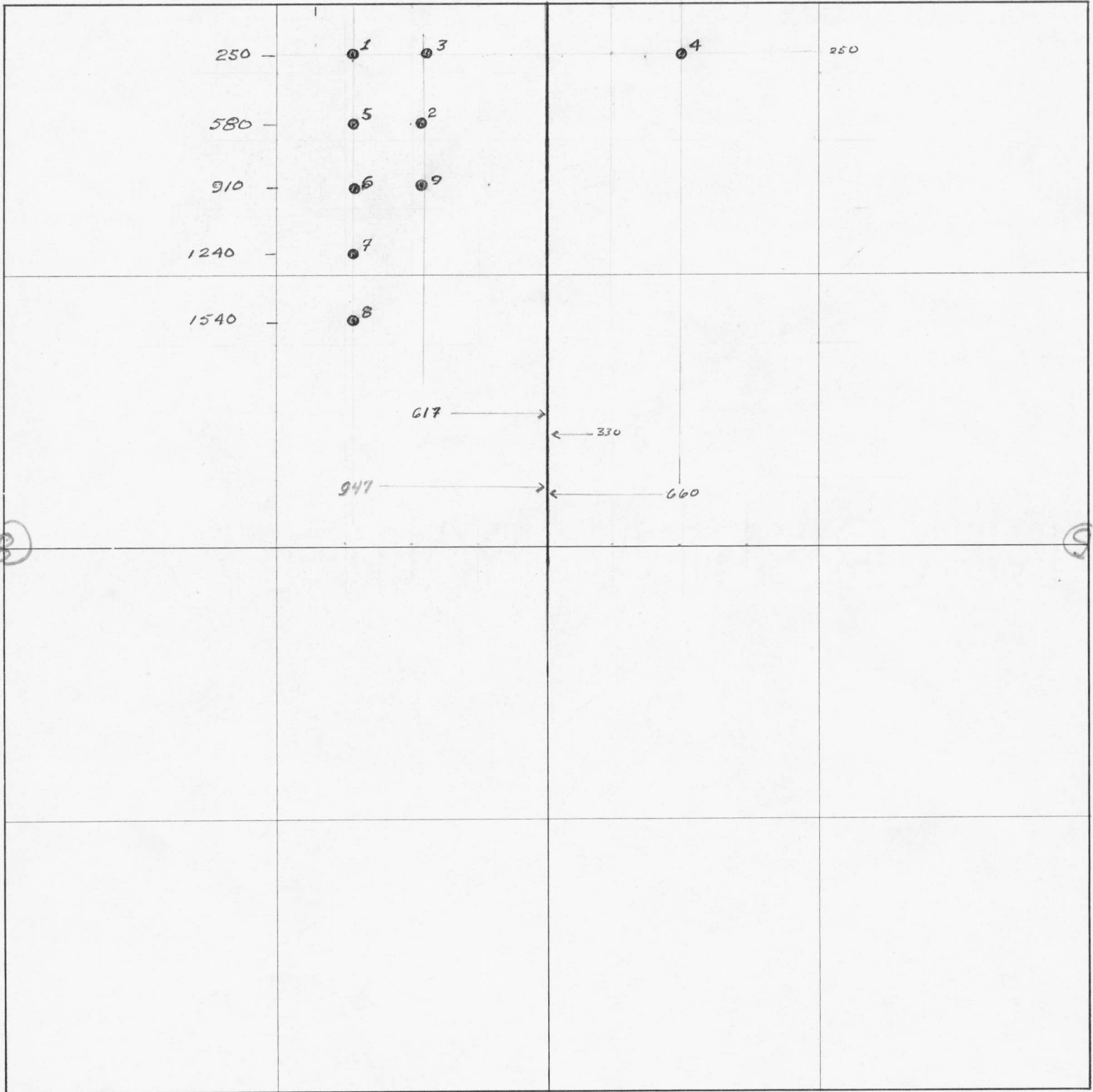
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MO. OIL & GAS COUNCIL

LIMPUS POOL

SECTION 8 E 9 TOWNSHIP 43 RANGE 33 COUNTY CASS STATE MO.



MISSOURI OIL AND GAS COUNCIL
WELL LOCATION PLAT

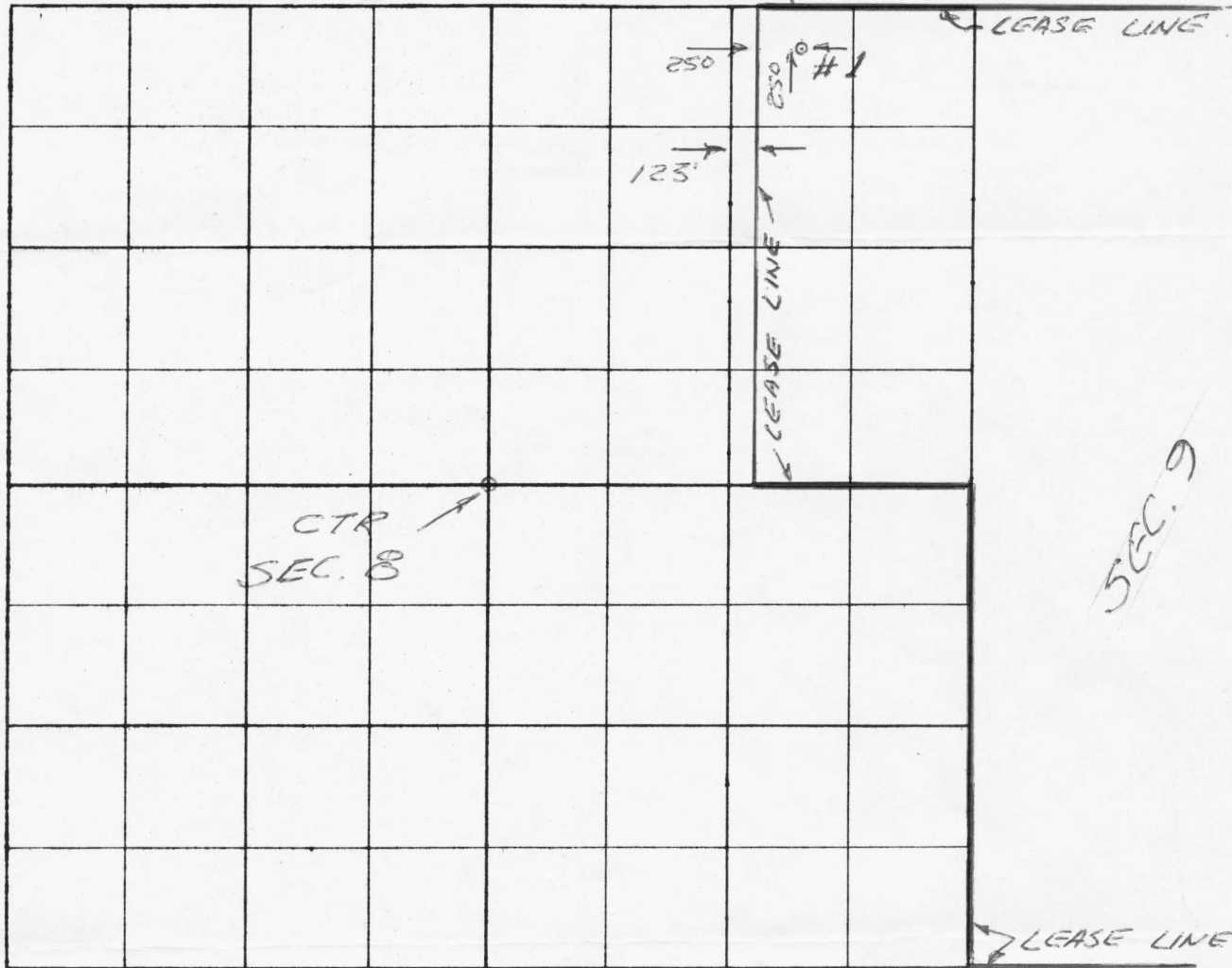
Form OGC - 4

Owner: Ke-La-Da Enterprises, Inc.

Lease Name: Hall (Well No. 1) County, Cass

250 feet from (N) - (S) line and 947 feet from (E) - (W) line of Sec. 8 Twp. 43 Range 33

SCALE
1" = 1000'



REMARKS: _____

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest lease and section lines, and from the nearest well on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well. Do not confuse survey lines with lease lines. See rule 7 - 3 (b) for survey requirements.

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250 Rolla, Mo. 65401
One will be returned.

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Howard L. Sherman
Registered Land Surveyor

MISSOURI OIL AND GAS COUNCIL

Form OGC-5

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

New Well ☒ Work Over ☐ Deepen ☐ Plug Back ☐ Same Reservoir ☐ Different Reservoir ☐ Oil ☒ Gas ☒ Dry ☐

Owner *He-La-Da Estate Inc*Address *Box*Lease Name *Hall*Well Number *1*

Location

*250' FNL 947' FEL*Sec. -- TWP-Range or Block & Survey
*8-43-33*County *Can*Permit number (OGC3 number)
*20 091*Date spudded
*12-12-77*Date total depth reached
*510'*Date completed, ready to produce
*1-12-78*Elevation (DF, RKB, RT or Gr.)
950 feetElevation of casing hd. flange
feetTotal depth
*510*P. B. T. D.
*378'*Producing interval (s) for this completion
*232-240*Rotary tools used (interval)
From *0* to *510*
Drilling Fluid used *NONE (AIR)*Cable tools used (interval)
From toWas this well directionally drilled?
*No*Was directional survey made?
*No*Was copy of directional survey filed?
No

Date filed

Type of electrical or other logs run (list logs filed with the State Geologist)

GAMMA-RAY-NEUTRON

Date filed

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
<i>LONG STRING</i>	<i>6 1/2</i>	<i>4 1/2" 60</i>	<i>9 #</i>		<i>60 SACK</i>	

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
<i>2" in.</i>	<i>364</i> ft.	<i>NONE</i> ft.	<i>NONE</i> in.				

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval
<i>2</i>	<i>WIRELINE</i>	<i>264-254</i>	<i>12 1/4" 44 gal H₂O</i>	<i>242-264</i>
<i>1</i>	<i>"</i>	<i>254-244</i>	<i>3000 # FINE SS</i>	
			<i>1000 # CRS SS</i>	

INITIAL PRODUCTION

Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)				
12, Jan 1978		PUMPING 1 7/8" lift pump suckerrod				
Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
12, JAN	24		5 bbls.	small MCF ANDUENT TSTM	TRACE bbls.	32.9 API (Corr.)
Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
40 #	40 #	5 bbl	5 bbls.	TSTM MCF	Trace bbls	

Disposition of gas (state whether vented, used for fuel or sold):

Method of disposal of mud pit contents:

No pits used (Air Rotary)

CERTIFICATE: I, the undersigned, state that I am the *Manager* of the *He-La-Da Estate* (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

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Signature

Remit two copies: one will be returned

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KE-LA-DA Enterprises

#1 Hall

Sec. 8, 43N, 33W

Cass County, Missouri

250' FNL 947' FWL

Sample Tops

Knobtown facies	100 (+850)
Lower Knobtown sand	242 (+708)
Myrick Station Ls.	344 (+606)
Peru sand	350 (+600)
Ft. Scott ls	360 (+590)
Squirrel ss	418 (+532)
Ardmore ls	496 (+454)

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MO. OIL & GAS COUNCIL

W00025

DATE 12/14/77

DATE 12/14/77

COMPANY		Ke-La-Da Enterprises		FARM Hall		WELL NO. 1		ELEV		PAGE NO 1	
COUNTY		Cass		STATE		Missouri		LOCATION		Sec. 8, 43N, 33W	
								TYPE SAMPLE		Hammer Wet	
DEPTH								TR-Trace		P-Poor	
From: To		Lithology		Description				F-Fair		G-Good	
								Porosity		Fluor. Stain Odor	
0	10			Clay, yellow, brn							
10	20			Clay, yellow, brn; sh, yellow, brn; ls, brn, dense; ls, grey, hard; sh, blk; chert, grey; Fusulinid							
20	30			ls, grey, blk, hard, dense; tr chert, Fusulinids, foss.							
30	40			ls, grey, brn; fossils, fusulinids, brachs; tr oil stain on isolated pieces @ 35'; ls, grey, wh, dense; some blue chert; tt; NS.							
40	50			ls, grey-tan; foss, brach, fus; dead oil stain							
50	55			sh, blk, hard; ls, aa.							
55	60			ls, brn, tan, dense; foss.							
60	65			ls, aa; tr grnash; blk sh; dead oil st							
65	70			ls, white, tan, chalky							
70	75			ls, aa; tr grn cast ls							
75	80			sh, blk, hard; ls, aa							
80	85			ls, brn dense; foss; Sln							
85	90			ls, aa							
90	95			clay, blk, grey, gummy							
95	100			ls, brn, dense; sh, grey, soft, gummy; ls, very pyritic							
100	105			sh, grey, pyritic, soft							
105	110			ss, wh, grey, vfg, hard, p/p; NS; blk scum on water							
110	115			ss, aa, dirty, shly. Blew hole. No gas							
115	120			ss, vfg, well sorted, very micaceous; carbon flakes; NS of oil or gas							
120	125			siltstone, grey, micaceous, dirty							
125	130			aa, pyritic							
130	135			aa							
135	140			ls, brn, tan, dns; foss; chert, wh							
140	145			silt, grey, sdy							
145	150			aa; sh, grey							
150	155			sh, grey, silty							

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DATE 12-15-77

COMPANY		Ke-La-Da Enterprises		FARM		Hall		WELL NO. 1		ELEV		PAGE NO 2	
COUNTY		Cass		STATE		Missouri		LOCATION		Sec. 8, 43N, 33W		Hammer TYPE SAMPLE Wet	

DEPTH		Lithology	Description	TR-Trace P-Poor F-Fair G-Good			
From	To			Porosity	Fluor	Stain	Odor
155	160		sh, grey, silty				
160	165		sh, grey, silty				
165	170		sh, grey, silty, micaceous				
170	175		sh, grey, hard, silty, pyritic				
175	180		aa				
180	185		sh, grey				
185	190		sh, grey, hard				
190	195		sh, grey, hard, some darker shale				
195	200		sh, aa				
200	205		ls, hard, tan, dense, xln; calcite xls				
205	210		silt, grey, hard				
210	215		aa; ss, vfg, silty				
215	220		ss, vfg, silty, dirty; NS; ls, brn, dirty;				
			sh, grey				
220	225		sh, grey, hard				
225	230		aa				
230	235		aa, blk sh				
235	240		blk sh, hard; sh, grey				
240	245		sh, grey; ss, tan, grey; show oil on water;				
			good odor				
245	250		ss, vfg, grey-tan, hard, odor, light show				
250	255		ss, aa; sh, grey				
255	260		sh, grey, hard				
260	265		ss, vfg, grey, hard, wet				
265	270		sh, grey, silty				
270	275		aa				
275	280		sh, grey, silty; ss, vfg, silty				
280	285		aa, less sand				
285	290		shale, grey				
290	295		ls, tan, xln, tt; tr grn shale				
295	300		sh, grey				
300	305		ls, brn, grey, dense, xln, very foss, tt				
305	310		sh, blk, grey				

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DATE 12-16-77

COMPANY		Ke-La-Da Enterprises		FARM Hall		WELL NO. 1	ELEV	PAGE NO 3	
COUNTY Cass			STATE Missouri	LOCATION Sec. 8, 43N, 33W			TYPE SAMPLE Hammer, Wet		
DEPTH		Lithology	Description	TR-Trace		P-Poor			
From	To			F-Fair		G-Good			
				Poro	Fluor	Stain	Odor		
310	315	315	ls, brn, dense, xln, NS						
315	320		ls, aa; blk sh						
320	325		sh, blk grey						
325	330		aa						
330	335		aa						
335	340		sh, blk; ls, blk, hard, dirty						
340	345		ls, blk, hard, foss, fusulinid; coal; clay.						
			grey					Myrick	
345	350		ss, fg, hard, dirty, carbon flakes.; blk,						
			grey calc, coal						
350	355		ss, aa; NS; ls, brn, tan, foss					Ft. Sc.	
			Blew hole @ 355, blowing gas, lit flare,						
			tested 5 on U tube, 26,500 max, 23,000 min.						
355	360		ls, brn, dense, foss, fusulinids (lots)					Ft. Scott	
360	365		ls, brn-tan, aa						
365	370		ls, brn, grey, wh, less foss.						
370	375		sh, grey, hard						
375	380		sh, grey, blk, hard, calc						
380	385		ls, brn, tan, hard, foss						
385	390		sh, blk, coal trace						
390	395		ls, brn, tan; sh, limy, grn; ss, vfg, grn, silty						
395	400		sh, blk, grn, grey; silt, green						
400	405		sh, blk, grn, foss, wh chert						
405	410		sh, blk, coal						
410	415		sh, blk; ls, tan, shly, silt grey; ss, vfg,						
			grey, NST						
415	420		ss, vfg, vfg, grey, tt; no oil show, soft to						
			friable (blew hole) gas to surface, good flare						
421			Siltstone, grey, very micaceous						
422			aa						
423			aa						
424			aa, brn, concretions						
425			aa, grey shale						

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DATE 12-16-77

[illegible]

KE KE-LA-DA ENTERPRISES

#1 Hall

Sec. 8, 33N, 43W

Cass County, Missouri

Well History

1977

- 12 Dec. Move in rotary tools. Joy Harper Drilling Co. of Urich, Mo. contractor; rig, Schramm, air rotary. Moved in rig. Got rig & service truck stuck on way to location. S.D. waiting on tractor to pull rig. T.D. at 5 p.m. 0'.
- 13 Dec. S.D. Rig stuck. Crew came at 3:15. Went to rig, moved rotary tools over stake with winch and back hoe. Set compressor with winch and back hoe. Nippled up. T.D. at 6 p.m. 0".
- 14 Dec. On location at 9:30. Worked on rig. Spudded 8' hole w/ hammer at 10:45. Drilled to 40' at 12:45. Took off hammer and went back in hole with 9" tri-cone hole opener (rerun bit). Reamed 8" hole to 40'. Set 40', 2 joints, of 7 5/8" surface pipe and cemented with 3 sax of regular cement, mixed by hand. T.D. at 6 p.m. 40'.
- 15 Dec. On location at 9:30. Serviced rig, hooked up "blood" line. Set blowout preventer. Drilling at 12:30 w/ new 6 1/2" hammer. Top of Knobtown sand (sample) at 105'. Picked up good oil show at about 240-245, 245-250'. Blew hole, no gas. Drilled to a T.D. 300' at 5:30.
- 16 Dec. On location at 9:30 a.m. Serviced rig. Drilling at 10 a.m. Drilled Peru sand. Blew hole: show of gas, 23,000 cu. ft/day. Drilled ahead to top of Squirrel. Good sand. Blew hole: gas increase to 49,000 cu. ft/day. Drilled to 460'. Driller went to another rig and got 2 more joints of drill pipe. Drilled to a TD of 500' at 6 p.m. Tearing down rotary tools.
- 17 Dec. S.D. Waiting pipe and tools
- 18 Dec. S.D.

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- 19 Dec. S.D. Waiting on pipe and tools.
- 20 Dec. S.D.
- 21 Dec. On location at 10 a.m. Started in hole with $4\frac{1}{2}$ " HD40, 9# casing. Hit bridge at 340'. Blew hole, made 20', hit another bridge. Pressured casing pipe, came out of hole 40', broke hoisting line. Caught casing with other line. S.D. with 380' casing in hole. T.D. 510' by correction.
- 22 Dec. On location at 9 a.m. Started air in hole, blew hole. Worked each joint down. Pipe set at 507.9'. Finished setting casing at 3 p.m. T.D. 510'.
- 23 Dec. Crew at location at 11 a.m. Blew hole clean. Consolidated at location at 2:15 p.m. Cemented 507.9' of $4\frac{1}{2}$ " casing w/58 sax rig cement. Displaced cement with clear water. No returns. Bumped plug at 514.7' (Consolidated). Touched plug at 3:10 p.m. T.D. 510' W.O.C.
- 24 Dec. W.O.C.
- 25 Dec. W.O.C.
- 26 Dec. W.O. C.
- 27 Dec. Logged hole by Cornish Well S^rvices of Chanute. Shot 424-434' w/21 shots. Well started making gas. T.D. 507.5'.
- 28 Dec. Well dead, probably shot gas yesterday. S.D. W.O.E.
- 1978
- 3 Jan. Rigged up pulling unit over hold. Bailed hole, evil smelling water. Baled hole dry. No show. S.D.
- 7 Jan. Covered perforations 424-434' w/85 gallons of sand. S.D.
- 11 Jan. Perforated 242-266 w/35 shots by Cornish. T.D. 405'. Put in 15 gal sand. Rigged Layne-Western over hole to swab. Put swab on; couldn't get to bottom. Bridge @ 95'. Bailed sand. Will bring in wash pipe

to jet bridge out. S.D.

12 Jan. Hooked up wash pipe. Washed hole clean. Consolidated on location at 1 p.m. Spotted 1 bbl of 15% HCl at 265'. Pressured up. Pumped 121 barrels of gel H₂O; formation broke down at 600#. Pumped 20 saks fine sand, 10 saks coarse sand. Shut in. Opened well after 20". Well flowed frac water and sand for 20". Rigged up swab. Made 4 runs, only water; then started swabbing oil and water. Kept getting more oil. Stopped swabbing at 4:30 p.m.

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MO. OIL & GAS COUNCIL

MISSOURI GEOLOGICAL SURVEY AND WATER RESOURCES

Box 250

Rolla, Missouri 65401

County: CASS

Source: WELL, T.D. 506', HALL #1

Owner: KE-LA-DA ENTERPRISES, INC.

Location: SEC. 8, T. 43N, R. 33W
Archie, Mo.

Analysis No.: 8120

Analyst: GREG LOVELL

Collector:

Date Collected: 1-13-78 Date Analyzed: 1/78

CONSTITUENTS

IN PARTS PER MILLION

Turbidity	—
Odor	—
pH	—
Alkalinity (CaCO ₃)	144
Phenolphthalein	144
Methyl Orange	0
Carbonate (CO ₃)	87.8
Bicarbonate (HCO ₃)	0
Silica (SiO ₂)	—
Calcium (Ca)	82
Magnesium (Mg)	2
Sodium (Na)	2240
Potassium (K)	65
Total Iron (Fe)	0.72
Total Manganese (Mn)	0.01
Sulfate (SO ₄)	165
Chloride (Cl)	3500
Nitrate (NO ₃)	slight trace
Fluoride (F)	—
Total Dissolved Solids	6226
Total Hardness	214.3
Carbonate Hardness	144.0
Non-carbonate Hardness	70.3

Remarks:

Copies To:

CONFIDENTIAL

RESEARCH ENGINEERS, INC.

RESEARCH & DEVELOPMENT
PROCESS DESIGN

7515 TROOST, KANSAS CITY, MISSOURI 64131
HILAND 4-9800

April 10, 1978

Mr. Kenneth Limpus
Ke-La-Di Enterprises, Inc.
Box 197
Archer, Missouri 64725

Dear Mr. Limpus:

We have analyzed your crude oil sample which you recently submitted to us. The results are as follows:

TBP Distillation

<u>%Distilled</u>	<u>Temp °F.</u>
IBP	82
5%	178
10	250
20	360
30	456
40	548
50	635
60	718
70	800

A plot of this TBP Curve is enclosed.

API Gravity

Crude Oil	32.9°API
Fraction 82-265°F	67.0°API
Fraction 630-720°F	30.3°API

Measurement of viscosity of the fraction boiling between 630-720°F was 68.2 SUS at 100°F. All the fractions were nearly colorless including the last fraction boiling up to 720°F. All the distilled fractions had very little odor. The sulfur content of the crude oil was measured at 0.28 weight %.

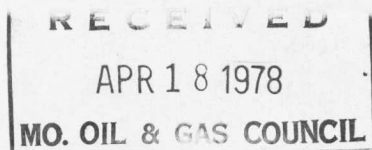
If you have any questions regarding your crude oil, we would be pleased to hear from you. It appears that the crude oil is a rather unusual crude oil for this area. A statement covering our analyses is enclosed.

Sincerely yours,

Frank C. Fowler

Frank C. Fowler

Enc.
FCF:MPW



Temp. °F

800

600

400

200

Gasoline

Kerosene

TBD

RECEIVED

APR 18 1978

MO. OIL

COUNCIL

20

40

60

80

100

% Distilled

4/5/78

FCF